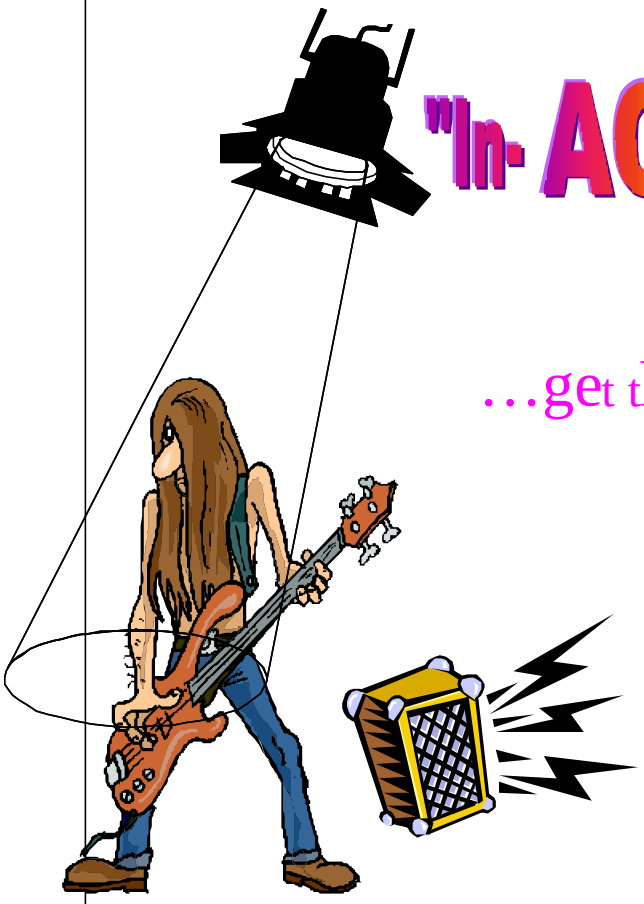
YOUR NEWSLETTER WITH THE LATEST IN RADIATION SAFETY

THE RADCO REGISTER

VOLUME 11, No. 2 APRIL 2001

A CECOM RADIATION SAFETY NEWSLETTER FOR THE US ARMY NATIONAL GUARD

#1 on the BILLBOARD Charts.....



"In-ACADA-Da-Vida" ...baby

...get the "**hard rockin**" info for the ACADA inside!

YOUR STATE and LOCAL RADIATION SAFETY OFFICERS (RSO) are: (fill-in)

SRSO: _____ **Phone:** _____

ASRSO: _____ **Phone:** _____

LRSO (CSMS): _____ **Phone:** _____

LRSO (USP&FO): _____ **Phone:** _____

LRSO (MATES): _____ **Phone:** _____

LRSO (AASF): _____ **Phone:** _____

IN THIS ISSUE:

The distribution and content of this newsletter is directed to Army National Guard activities for which the U.S. Army Communications-Electronics Command (CECOM) Directorate for Safety, Radiological Engineering Division, serves as RSSO. This newsletter is a periodic publication summarizing the activities of the National Guard Bureau (NGB) and CECOM for the previous months including any current radiation safety issues. The primary distribution of this newsletter is to Occupational Health/State Safety Offices, USP&FOs and CSMSs, with local reproduction encouraged.

WEB: www.monmouth.army.mil/CECOM/safety

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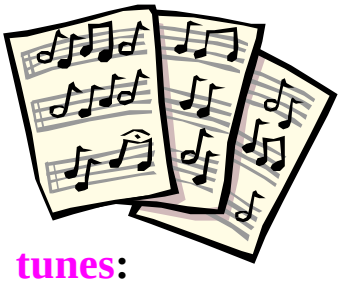
ON GUARD…

In-ACADA-da-Vida! Say Good Bye to Wipe Testing the ACADA !

When it comes to wipe testing the ACADA….we're singing a different tune…

As you may know, the U.S. Army Soldier and Biological Chemical Command (SBCCOM) is now the licensee for the M43A1 Chemical Agent Alarm, the CAM, the ICAM and the M22, better known as the ACADA. As such, the current way of doing business has changed. The leak test frequency for the four radioactive commodities listed above has changed, so here's the latest leak test…..



tunes:

The M43A1, CAM, and ICAM are to be leak tested at a frequency not to exceed 12 months.

Now, what does this really mean? If you were to leak test your M43A1/CAM/ ICAM on 5 June 2001 the next leak test would be due on/or before 5 June 2002. Previously, the leak test frequency was annual which was subject to interpretation i.e., 365 days, 12 months, quarter moon?? ☺ etc..

In the Army National Guard, these leak tests are performed by a few "rockin' " technicians at the Combined Support Maintenance Shop (CSMS).

…..And for some other notes:

There is no routine leak test requirement for the ACADA.

SBCCOM has received approval from the NRC for the elimination of the annual leak test for the ACADA.

When you receive the ACADA in the field, it will have had a leak test (performed by the manufacturer) and you will not be required to perform any additional leak tests. Depot level maintenance will still have a requirement for performing a leak test. The leak test is required after the removal and reinstallation or replacement of the source module. This replacement is only authorized at depot level. Maintenance at the DS/GS level is not authorized to remove the source module and therefore would not require a leak test.

Remember, if you have 1 or more of these items in your state (the ACADA excluded), you must ensure that 100% of the items are within the leak test intervals. If as much as one leak test is overdue, then your radiation safety program is non-compliant…. and that'll have your commander singing a different tune! ★

More "Radiant" Info for Posting a Radiation Hazard!

As a follow-up to the last RADCO article on posting a Radioactive Storage area, we have assembled a list of the most common used isotopes with their required posting quantities.

CAUTION, RADIOACTIVE MATERIAL(S) SIGN is required at areas or rooms containing radioactive material in quantities greater than 10 CFR 20.1902(e). Here are the quantities:

3.7E2Bq or 0.01 uCi
(Am-241 – M43A1)
(Pu-239 - AN/UDM-6).

3.7E4Bq or 1.0 uCi
(Ra-226 – (6) IM/174A)
(Sr-90 – AN/UDM-2).

3.7E6Bq or 100.0 uCi
(Cs-137 – MC-1)
Pm-147 -LAW).

3.7E7Bq or 1000.0 uCi
(Ni-63 – CAM)
Th-232, Nat. U).

3.7E8Bq or 10000.0 uCi
(H-3 – lensatic compass)
Kr-85 – (2) check sources).

As always if there are any questions give us a call and we'll help you make sense of it all. ☆

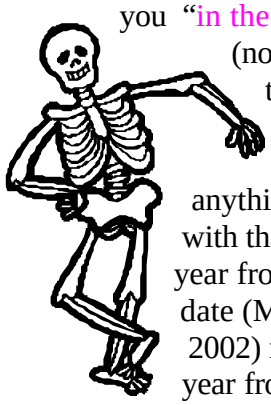
So Far...Not So Good!

We told you last time that we, as RSSO, had revamped the frequency at which Radiation Safety Program (RSP) evaluations will be conducted for the NGB. States with compliant RSPs would be evaluated every 2 years provided an annual internal self-audit is performed. Good news…. right?

And what's more, when you receive notification from us that a self-audit is due, you are given 45 days to complete it and return it to us. 45 days….sound familiar? This is the same timeframe we give you to address any findings when we do an on-site program evaluation.

And now for the bad news. Of the self-audits we have distributed so far for FY01, not one location met the 45 day suspense and we've had to "hunt" for the information.

We just want you to know that no matter when you complete your self-audit, you will still be on the same schedule. In other words, if we visited you in March of 2000, your self-audit will be required in March of 2001. Be aware that we will visit you "in the flesh" (not that there's anything wrong with that!) one year from that date (March of 2002) not one year from the date you complete your self-audit.



So it's really up to you…. conduct your self-audits on time, and copy furnish us with your results within 45 days and avoid seeing us every year! ☆

GOIN' POSTAL....

Instructions for Shipping your AN/VDR-2 or SM-400A!

You see that radioactive check source attached to your AN/VDR-2 or SM-400A survey meter?? Guess what… you gotta' ship it as a radioactive materials package.

The check source on the AN/VDR-2 contains 60 nanocuries of Th-232 and the SM-400A contains 30 nanocuries of Th-232. You can ship both of these as Radioactive Material, Limited Quantity by following these instructions:

Place a notice in the package with the word:

"RADIOACTIVE"

and the statement :

"This package conforms to the conditions and limitations specified in 49 CFR 173.421 for radioactive material, excepted package-limited quantity of material, UN2910". Also include the

Name of Sender, Address, and Commercial Phone Number.

Perform a wipe test on the outside of the package. Fill out our "Analysis Request Form," and send the wipe to our lab at:

US Army CECOM
Directorate for Safety
ATTN: AMSEL-SF-RE (LAB)
BLDG 2540, Laboratory Road
Fort Monmouth, NJ 07703

After you have received results of the wipe test from our lab finish preparing the package for shipment.

Perform a radiation survey on the outside of the shipping container using an "ACTIVE" calibrated RADIAC meter with a Beta/Gamma probe. The highest meter reading on contact of the package should be less than 0.5 mr/hr.

Fill out a Radioactive Material Movement Form and fill out the Federal Express Airbill IAW the instructions below.

FILLING OUT FEDERAL EXPRESS AIRBILL FOR OVERNIGHT SHIPMENT

Block 1
Enter date of shipment.
Enter the name of person shipping instrument.
Enter the phone number of the person above.
Enter the organization.
Enter the address.
Enter the city.
Enter the state.
Enter the zip code.

Block 2
Enter the following statement "RADIOACTIVE MATERIAL, EXCEPTED PACKAGE, LIMITED QUANTITY OF MATERIAL"

Block 3
Enter "Mary Chislett" as the recipient's name.
Enter (732) 427-5606 for the phone number.
Enter "Directorate for Safety".
Enter "Bldg 2540, Charles Wood Area".
Enter "Fort Monmouth".
Enter "NJ". Enter "07703".

Block 4a
Put an "X" in the box labeled "FedEx Priority Overnight"

Block 5
Put an "X" in the box labeled "Other package"

Block 7
Put an "X" in the box labeled Bill to: "Recipient". You will also be required to enter an account number, which will be provided by CECOM DS when you call to schedule calibration.

…….and now you're ready to go postal!!

From the desk of Cecil B. DMIL..... "DMILing the AN/GRC-142BLP/LA Radio Terminal Set"

In our continuing effort to provide you with the best advice on the demilitarization of radioactive commodities, this latest attempt will focus in on the AN/GRC-142BLP/LA Radio Terminal Set, NSN 5815-00-443-5511.

Some of you probably have received instructions from the Item Manager to turn in the AN/GRC-142BLP/LA Radio Terminal Set. This item consists of the following meter movements and contains the radioactive material Radium-226:

a. NSN: 6625-00-226-5679, Component: AM3349, Meter Arbitrary.
b. NSN: 6625-00-226-5680, Component: RT834, Meter Audible.
c. NSN: 6625-00-226-5680, Component: RT662, Meter Audible.
d. NSN: 6625-00-226-5681, Component: AM3349, Meter Arbitrary.
e. NSN: 6625-00-257-1103, Component: MD522, A, Meter, Arbitrary.
f. NSN: 6625-00-926-4412, Component: MD522, Ammeter.

Before you can turn in the AN/GRC-142BLP/LA Radio Terminal Set (End Article Application (EAA)) to the Defense Reutilization and Marketing Office (DRMO), you must determine if the above meter movements are radioactive. And as always, you must remove and dispose of the radioactive components as radioactive waste.

This is how you do it….but only with your Local RSO involved!

You must perform a radiation survey of the AN/GRC-142BLP/LA with a calibrated "Active" AN/VDR-2 RADIAC Set to determine if the meter movements are radioactive.

Remove only those radioactive meter movements in their entirety by nondestructive means. Use the proper tool to remove them, i.e., screwdrivers or wrenches, etc., as appropriate. DO NOT REMOVE THESE ITEMS BY DESTRUCTIVE MEANS, i.e., do not use hammers, do not pry or force, etc..

Once the radioactive components have been removed, the RSO certifies, on the documentation (DD Form 1348-1), that the radioactive items have been removed and the remaining components are free from radioactivity. The nonradioactive components/ EAAs can now be transferred to the DRMO and the RSO can dispose of the radioactive meter movements as radioactive waste.

If you need to get hold of us regarding any other DMIL stuff, contact Barry Silber (alias, Cecil B. DMIL) of our staff.

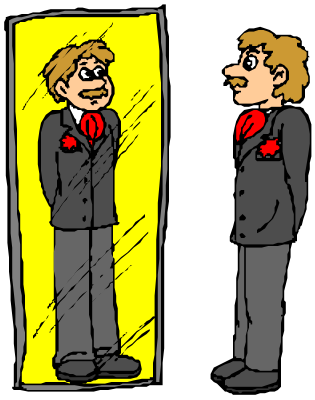
CECOM's Item Manager for this equipment, Ms. Gloria Richardson, may be contacted on DSN 992-9196; E-mail:

gloria.richardson@mail1.monmouth.army.mil ★

I Like to Move It....MOVE IT!!

Attention RADIAC calibrator users, if you're gonna' move it ….. don't forget to make that CALL!

So you're about to ship your RADIAC Calibrator to Redstone, or some other location, for calibration and you have completed all those packaging requirements and all that paperwork. You look at yourself in the mirror and say:



"*Mirror mirror on the wall…. who works harder than them all?*." Yes, you're finally done…..**or are you**?!?

Well, we'd like to remind you that you have one more detail to cover; that is, informing the appropriate organizations that you are about to ship your RADIAC calibrator.

It is a Nuclear Regulatory Commission (NRC) License requirement that we, the CECOM Directorate for

Safety, as the licensee, know at all times the location of our RADIAC Calibrators (i.e. the AN/UDM-2 and the AN/UDM-6). This is where you, the user, are a great help.

You must notify us, and the receiving installation POC, within 24 hours upon shipment of a RADIAC Calibrator. Just how important is my telephone call, you ask? Just think of what those calls accomplish: the licensee knows the location of the calibrator; the receiving official is aware of a pending shipment about to arrive at his doorstep; and the shipping Radiation Safety Officer can account for the movement of the radioactive material. So please, **keep us clued-in!**

If you need assistance on the shipping procedures for these calibrators, see TB 43-0137, "Transportation Information for CECOM Radioactive Commodities."

The POC at the CECOM Directorate for Safety for the movement of RADIAC calibrators is Nick Antonelli, DSN 987-5370 or COM 732-427-5370.

So if you have a calibrator and would "like to move it, MOVE IT"…. call Nick. ☆

Lookin' for a Great Action Video?!?

Well then as Arnold Schwarzenegger would say …. *"Hear me now, understand me later"!!*

Check out the latest and greatest Depleted Uranium (DU) training video (TVT 3-120). The new Tier 1 DU Awareness Video/CD-ROM, Version 2, dated 19 June 2000, prepared by the Chemical School at Fort Leonard Wood, is now available. If you, or any movie buffs you know, would like to obtain a copy, send an e-mail to SSG Englerth at: englerta@wood.army.mil.

INCLUDE IN THE E-MAIL A VALID AND COMPLETE MAILING ADDRESS;
ALSO REQUEST A CONFIRMATION THAT YOUR REQUEST WAS RECEIVED, AND THE EXPECTED DELIVERY DATE.

Copies are limited and are sent on a first-come/first served basis.

Viewing this tape helps to meet your DU awareness training requirements for all guardsmen working around DU or working in a potential DU environment. You are authorized to make copies of your CD/video for subordinate activities.

So spread the wealth of DU knowledge and…… "*hasta la vista baby*"! ☆

Welcome ABOARD!!

Last time we met we bid a sad farewell to Craig Goldberg. As you recall, Craig had left the division to begin a new career as a systems safety engineer. Alas, no sooner than we could pitch… (I mean place ☺) his stuff in temporary storage, along came our newest of hire'es….. Ms. Paula Jeter.

Paula joins the Radiological Division as a contract employee working for Modern Technologies Corporation. She is originally from Rhode Island and brings to the group 10 years experience in Health Physics/Radiation Safety from the commercial sector.

Paula is also a "CHP" ….no not a **C**alifornia **H**ighway **P**atroler, but a **C**ertified **H**ealth **P**hysicist. In addition, she has a BS in Health Physics as well as an MS in Radiological Sciences from the University of Massachusetts, Lowell.

Paula's previous work experience includes: RSO at a Radiopharmaceutical (nuclear medicine) Manufacturing Facility, Senior Health Physicist (HP) for Nuclear Pharmacies and Project HP for the decommissioning of a Nuclear Fuel Fabrication Facility and Fuel Analysis Hot Cells.

So what does all this mean…? It means Paula is way too smart and we'll all be working for her someday! But seriously, Paula will be supporting the Army National Guard by conducting training, evaluations, and anything else we can dole out to support your outstanding Radiation Safety Programs.

But first… we must teach her how to "LATA" (Learn All The Acronyms)! ☆

PUZZLES & BRAIN-TEASERS.....

QUICKIE QUIZ:

1. Situation: Your unit has a storage area containing an AN/UDM-2 RADIAC Calibrator set. Of the signs listed below, which is the correct posting?

   a. Caution- Radiation Area
   b. Caution- High Radiation Area
   c. Caution- Radioactive Material
   d. Caution- Very High Radiation Area

2. Your state maintains a compliant Radiation Safety Program (RSP), as such, CECOM will visit once every _____ year(s) to conduct an RSP evaluation.

a. 2
b. 3
c. 1
d. 4

3. ARNG maintenance units send all wipe test and leak test samples to the CECOM laboratory for analysis.

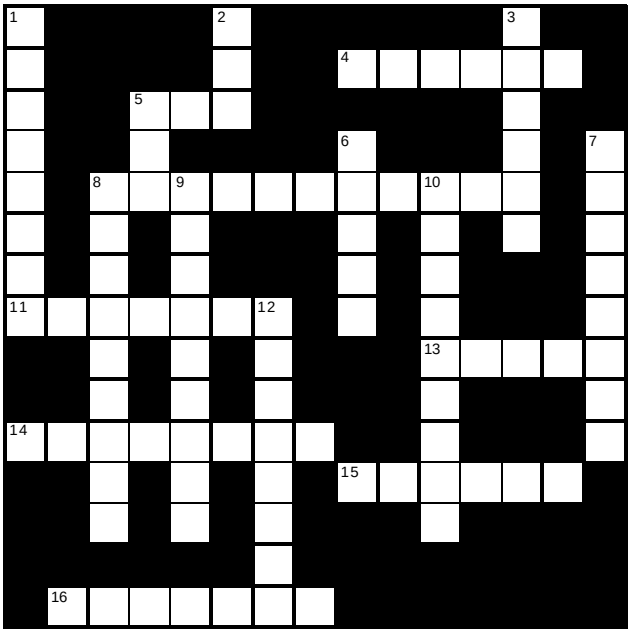
TRUE or FALSE

4. The ACADA contains _____ identical, _____ millicurie, _____ sources of radioactive material.

a. 3, 10, Ni-63
b. 2, 20, Ni-63
c. 3, 20, Ni-63
d. 2, 10, Ni-63

5. Requests for radioactive waste disposal instructions should be routed through your _____ for Commander, U.S. Army _____.

a. RSO, CECOM
b. SRSO, OSC
c. RSO, OSC
d. SRSO, CECOM



Across:

4. Section 206, _____ Law must be posted for a Radioactive Material Storage Area

5. Contains Nickel-63; used for chemical detection (abbr.)

8. The AN/UDM-2 must be stored in a _____ Material Storage Area

11. Isotope used in Fire Control Devices

13. Type of wipe (not used for tritium)

14. The MC-1 is used to determine the Soil _____ and Density

15. Performed to assess the radiological conditions

16. AN/UDM-2 radiation survey frequency

Down:

1. Performed every 6 months for the MC-1 and AN/UDM-

2. The AN/____-2 cannot be used to calibrate Active instruments

3. Radioactive isotope used in the CAM and ACADA. _____-63

5. M8A1 (acronym)

6. Replacing the M43A1 (acronym)

7. Active RADIACs must be _____ tested prior to performing a survey

8. Alpha, Beta, Gamma

9. Must be worn to determine personnel exposure

10. Required annually for radioactive material

12. Wipe used to survey for Tritium

GOOD LUCK:
...the answers are on the last page!!

NONIONIZING CORNER .....

"…….These are a Few of My Favorite (*Non-Ionizing*) Things"

Thus far, we've provided a fair amount of information on ***what*** non-ionizing radiation is, ***where*** it can be found to exist, ***what kinds of systems*** would produce it, and even brought you some insight as to the biological consequences of exposure to non-ionizing radiation.

Now let's apply this knowledge to something a little bit more practical…. in other words… how do you take what we've learned so far and go about establishing your own Non-Ionizing Radiation Safety Program (NIRSP).

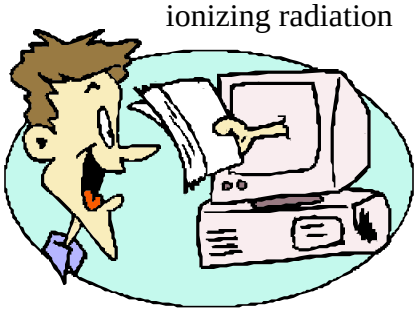
A great place to start is by looking in TB 43-0133 (Hazard Controls for CECOM Radiofrequency and Optical Radiation Producing Equipment). This newly revised TB is "**hot off the presses**" and is available through your publications office. For those of you that have access to the Internet, this TB can be viewed/downloaded from our website:

www.monmouth.army.mil/cecom/safety.

You'll find this document contains a wealth of information on almost every non-ionizing radiation-producing system fielded by CECOM.

You can get started by comparing your state's or your installation's equipment inventory listing to the Type Designations, National Stock Number (NSN) or Line Item Number (LIN) listings/cross references found in the TB. This effort on your part will go far in helping you to compile a listing of your non-ionizing radiation producing equipment.

Once that's done, you'll want to separate them into two main categories, Radiofrequency (RF) and laser/optical (some equipment may fall into both categories). Now, take another look in the TB for the non-ionizing radiation safety (hazard) information that applies to each item. The sorted (RF/laser) listing and the associated hazard information can now be put into a tabular format using WORD 97, etc. With your inventory now complete, anyone can easily see a listing of your non-ionizing radiation



producing equipment and the associated radiation safety controls required.

We'll examine a "few more of our favorite (*non-ionizing*) things" in the next RADCO as we provide a little more insight into what's involved in setting up your NIRSP. ☆

QUICKIE QUIZ SOLUTIONS:

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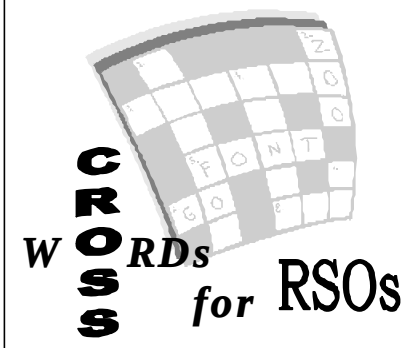

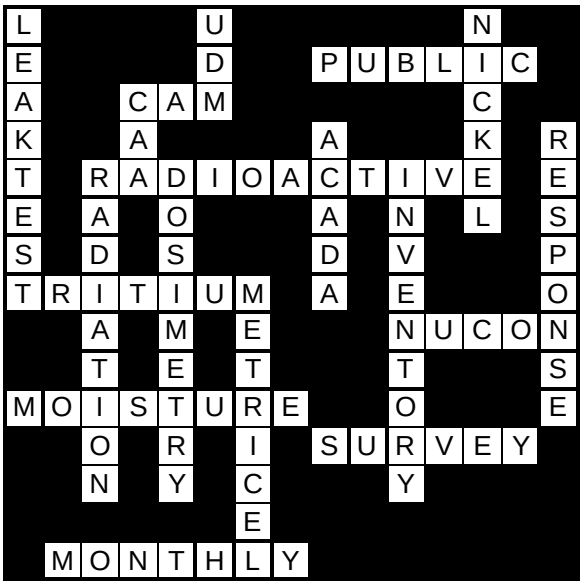

SOLUTIONS: